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REMARKS

Claims 1-22 were pending in the present Application. Claims 1, 2, 14, 16, 17, 19, and 20 have been amended and Claims 21-22 have been cancelled, leaving Claims 1-20 for consideration upon entry of the present Amendment. No new matter has been introduced by way of amendment. For example, support for the amendments to Claims 1, 16 and 19 can be found at least in paragraph [0034] and Claim 21 of the Specification as originally filed. In addition, Claims 2, 14, 17, and 20 have been amended to correct for unintentional typographical or grammatical errors.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Election of Species

The Examiner has stated that Claims 1-22 are generic to a plurality of disclosed patentably distinct species comprising the various flame retardant materials and has therefore requested an election of species of flame retardant.

Applicants elect the flame retardant material potassium diphenylsulfon-3-sulfonate. Currently, Claims 1-3, 5, 7-13, and 16-20 read upon the elected species. Specifically, Claims 1, 8-13, 16, 18, and 19 are generic, and Claims 2, 3, 5, 7, 17, and 20 are specific to the elected flame retardant.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 2, 14, 17, 20 and 22 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, Claim 2 stands rejected because "sodium or potassium or perfluorobutane" at line 6 is indefinite as to scope and meaning. Claims 2, 17, 20, and 22 stand rejected because the "and" prior to the last member of the Markush group is unnecessary. Finally, Claim 14 stands rejected because "may be the same or different" at line 5 is unclear.

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Applicants appreciate the Examiner's thoroughness in noting these unintentional typographical errors. Applicants have amended Claim 2 to remove the second "or" from "sodium or potassium or perfluorobutane" at line 6 as well as the "and" in line 7. Applicants have also removed the "and" at line 7 of each of Claims 17 and 20. Applicants have removed "may be the same or different" from Claim 14. Finally, Claim 22 has been cancelled.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection applied to Claims 2, 14, 17, and 20.

First Claim Rejection Under 35 U.S.C. § 102(b)

Claims 1, 2, 4, 6, 8-12, 15-17 and 19-22 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 4,289,685 to Druschke *et al.* (hereinafter "Druschke").

The rejection to Claims 21 and 22 has been rendered moot by the cancellation thereof. However, Applicants respectfully traverse the rejection applied to Claims 1, 2, 4, 6, 8-12, 15-17 and 19-20.

Currently amended independent Claim 1 is directed to a process for producing a fire resistant polycarbonate sheet, comprising compounding an aqueous solution of a flame retardant salt with a polycarbonate composition to form a fire resistant polycarbonate composition, wherein shear is applied during the compounding; and extruding the fire resistant polycarbonate composition into the fire resistant polycarbonate sheet, wherein a number of surface inclusions in the extruded fire resistant polycarbonate sheet is reduced about 100 percent compared to compounding the flame retardant salt in solid form with the polycarbonate composition.

Currently amended independent Claim 16 is directed to a process for reducing haze in a fire resistant polycarbonate sheet, comprising compounding an aqueous solution of a flame retardant salt with a polycarbonate composition to form a fire resistant polycarbonate composition, wherein shear is applied during the compounding; and extruding the fire resistant polycarbonate composition into the fire resistant polycarbonate sheet, wherein a number of surface inclusions in the extruded fire resistant polycarbonate sheet is reduced about 100 percent

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compared to compounding the flame retardant salt in solid form with the polycarbonate composition, and wherein the haze is reduced compared to compounding the flame retardant salt in solid form with the polycarbonate composition.

Currently amended independent Claim 19 is directed to a process for reducing color in a fire resistant polycarbonate sheet, comprising: compounding an aqueous solution of a flame retardant salt with a polycarbonate composition to form a fire resistant polycarbonate composition, wherein shear is applied during the compounding; and extruding the fire resistant polycarbonate composition into the fire resistant polycarbonate sheet, wherein a number of surface inclusions in the extruded fire resistant polycarbonate sheet is reduced about 100 percent compared to compounding the flame retardant salt in solid form with the polycarbonate composition, and wherein a yellowness index is reduced compared to compounding the flame retardant salt in solid form with the polycarbonate composition.

Druschke is generally directed to a process for rendering thermoplastic aromatic polycarbonates fire-resistant.

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Varient Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). Applicants assert that Druschke fails to disclose each and every element of currently amended independent Claims 1, 16 and 19. Specifically, at least the feature “compounding an aqueous solution of a flame retardant salt with a polycarbonate composition to form a fire resistant polycarbonate composition, wherein shear is applied during the compounding” is not taught or even suggested by Druschke. Druschke adds an aqueous solution of the salt-like flameproofing agent to a washed and neutral organic solution of the polycarbonate. Evaporating off both the organic solvent and the water allows the polycarbonate to be isolated. According to Druschke (Column 2, lines 23-25), “Thorough mixing of the phases to form a homogeneous mixture can be further promoted by using customary amounts of suitable emulsifiers.” Druschke’s process of forming a fire resistant polycarbonate composition is markedly different than Applicants’ claimed process of, *inter alia*, compounding an aqueous solution of a flame retardant salt with a polycarbonate composition to form a fire resistant polycarbonate composition, wherein shear is applied during the compounding”.

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For at least these reasons, Applicants respectfully request reconsideration and withdrawal of the rejection to Claims 1, 2, 4, 6, 8-12, 15-17 and 19-20.

Second Claim Rejection Under 35 U.S.C. § 102(b)

Claims 1-3, 5, 7-14 and 16-22 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 4,113,695 to Mark (hereinafter "Mark").

The rejection to Claims 21 and 22 has been rendered moot by the cancellation thereof. However, Applicants respectfully traverse the rejection applied to Claims 1-3, 5, 7-14, and 16-20.

Applicants contend that Mark fails to disclose each and every element of currently amended independent Claims 1, 16, and 19. Each of these claims includes, *inter alia*, the feature "extruding the fire resistant polycarbonate composition into the fire resistant polycarbonate sheet, wherein a number of surface inclusions in the extruded fire resistant polycarbonate sheet is reduced about 100 percent compared to compounding the flame retardant salt in solid form with the polycarbonate composition", which is not taught or even suggested by Mark. There is no mention of extruding the fire resistant polycarbonate composition into a sheet; nor is there any mention of the surface quality of the fire resistant samples disclosed therein. Therefore, Mark fails to anticipate Applicants' claimed processes.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejection applied to Claims 1-3, 5, 7-14, and 16-20.

Third Claim Rejection Under 35 U.S.C. § 102(b)

Claims 1, 8-12, 15, 19 and 21 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent No. 4,600,742 to Higgins (hereinafter "Higgins").

The rejection to Claim 21 has been rendered moot by the cancellation thereof. However, Applicants respectfully traverse the rejection applied to Claims 1, 8-12, 15, and 19.

Applicants contend that Higgins also fails to disclose each and every element of currently amended independent Claims 1, 16, and 19. Like Mark above, Higgins does not disclose or

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suggest at least the feature “extruding the fire resistant polycarbonate composition into the fire resistant polycarbonate sheet, wherein a number of surface inclusions in the extruded fire resistant polycarbonate sheet is reduced about 100 percent compared to compounding the flame retardant salt in solid form with the polycarbonate composition”. While Higgins mentions, in Column 8, lines 46-49 that “The metallic salts may be admixed with the polycarbonate in a finely divided solid form or they be admixed in the form of a solution or dispersion”, Higgins is silent regarding the surface qualities of any subsequently extruded sheet products of the fire resistant polycarbonate compositions disclosed therein. Because Higgins fails to disclose this claimed feature, Higgins cannot anticipate Applicants’ claims.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection applied to Claims 1, 8-12, 15, and 19.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 3, 5, 7, 11, 13, 14 and 18 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Druschke in view of Mark. In addition, Claims 11, 13 and 18 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Higgins in view of Mark. Applicants respectfully traverse these rejections.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

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Applicants assert that a *prima facie* case of obviousness has not been established against Claims 3, 5, 7, 11, 13, 14 and 18 because all elements of these claims have not been disclosed or suggested by the cited art. These claims depend from, and ultimately include all of the features of their respective base claims (i.e., Claim 1 or 16). Thus, each of Claims 3, 5, 7, 11, 13, 14 and 18, include at least the feature "extruding the fire resistant polycarbonate composition into the fire resistant polycarbonate sheet, wherein a number of surface inclusions in the extruded fire resistant polycarbonate sheet is reduced about 100 percent compared to compounding the flame retardant salt in solid form with the polycarbonate composition". Given that none of Druschke, Mark or Higgins discloses or suggests this feature, any combination of these references would also fail to disclose or suggest this feature.


Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection(s) applied to Claims 3, 5, 7, 11, 13, 14 and 18.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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